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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
WALSH, DANIEL I	

ART UNIT	PAPER NUMBER
2876	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/710,326	BONALLE ET AL.	
	Examiner	Art Unit	
	Daniel I. Walsh	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2-07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of the RCE of 1-30-07 and IDS (5) of 2-20-07. The Examiner notes that the IDS references appear to be references already cited by the Examiner in the prosecution history.

Claim Objections

2. Claim 7 objected to because of the following informalities: Claim 7 is written as dependent on claim 7. The Examiner has interpreted the claim dependent on claim 6, for purposes of Examination.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-6, 8-16, 18, 20, and 21-35, and 37-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black (US 6,925,565), in view of Justin (US 2005/0211784) and Hoshino (US 6,636,620).

Re claim 1, Black teaches a smartcard configured to communicate with a reader, a reader configured to communicate with the system, a biometric sensor to detect a sample, the sensor configured to communicate with the system (FIG. 1A). Though silent to a verification device to verify the sample, the Examiner notes that a transaction is authorized upon verification of the sample. Therefore, at the time the invention was made, it would have been obvious to have a verification device in order to verify the sample as part of the authentication (security).

Black is silent to the biometric/scan sample being a smellprint scan sample.

The Examiner notes that biometric samples are well known and conventional in the art, and include DNA, fingerprints, smellprints/odors, retina scans, etc., as means to authenticate an individual. It would have been an obvious expedient to use a smellprint as an alternative means to identify a person, with enhanced security. The Examiner notes that there are alternative types of biometrics that can be used to identify an individual. The selection of which biometric is within the skill in the art, based on the system constraints, costs, etc. Nonetheless, Justin teaches that various biometric sensors are well known and conventional for identification, and can include odor detection (interpreted as a smellprint) (paragraph [0025]). Additionally, the

Examiner notes that cards having sensors or separate devices with sensors working with cards are well known and conventional in the art.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black with those of Justin.

One would have been motivated to do this in order to have different forms of biometric identification, well know and conventional in the art, to verify a user securely.

The Examiner notes it is understood that the sensor generates smellprint data from the sample, as part of the processing.

Black/Justin is silent to the claim limitations regarding the encryption.

Hoshino teaches encryption (see claim 3). The Examiner has interpreted as encryption is used to facilitate access, this is broadly interpreted as using the data as a variable in an encryption calculation to secure data (such as for the transaction), where the variable is understood as part of the data used in the authentication/verification process.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin with those of Hoshino.

One would have been motivated to do this for security.

Re claim 2, the Examiner notes that the sensor communicates with the system via at least one of a smartcard, reader, and network (FIG. 1A of Black).

Re claim 3, though silent to public/private keys, as encryption has been discussed above, the Examiner notes that public/private key encryption is well known and conventional in the art and an obvious expedient for security while maintaining ease of use and acceptability.

Re claim 4, the Examiner notes that as the biometric is used to authenticate/verify an individual, the Examiner notes that after a user is authenticated, it would have been obvious to generate a message to that effect. This is broadly interpreted as a message authentication code/indication of authentication.

Re claims 5-6, Black teaches (col 6, lines 56+) that the customer record can be stored locally or remotely. The Examiner notes that though Black is silent to a datapacket stored on a database, Black teaches that the customer record can include biometric information, user information, etc. (FIG. 5A+ for example). Therefore, the Examiner notes that it would be within the skill in the art for such a collection of data can be interpreted as a data packet (and to include the smellprint/odor data as discussed above). It would have been obvious to store such information on a database, in order to have a well-known and conventional means of storing data for quick retrieval and organization. It has been discussed above that the data can be stored remotely or locally. Accordingly, it would have been obvious to one of ordinary skill in the art to store it on the smartcard or a remote device based on security needs.

Re claim 8, though Justin teaches an odor sensor, Justin is silent to it having at least an electronic, chemical, gas chromatograph, spectrometer, conductivity, or piezoelectric sensor. The Examiner notes that such a sensor is well known and conventional for odor/smellprints and therefore is an obvious expedient to detect and process a proffered smellprint/odor sample.

Re claim 9, it is well known and conventional in the art for odors/smellprints to be verified against at least one of statistical, ANN, and neuromorphic techniques, which are well known and conventional for odor/smellprint detection and processing, and therefore is an obvious expedient for such purposes.

Re claim 10, the Examiner notes that Justin teaches an odor/smellprint sensor. Accordingly, it is obvious to one of ordinary skill in the art that such a sensor would be configured to detect and verify such claimed characteristics as part of its processing.

Re claim 11, the Examiner notes that Black/Simon are silent to detecting and verifying false odorants, man made smells, abnormal odorants and body heat. However, the Examiner notes that if the smellprint/odor sample provided to the sensor does not match a stored sample or is not an adequate sample, an error or mismatch would result. Accordingly, such a function can be interpreted as detecting/verifying false/abnormal odorants (odors/smells that do not match).

Re claim 12, the Examiner notes that such security procedures are well known and conventional in the art for ensuring the authenticity of samples (Applicants own specification). As discussed above by the abstract of Black, a proffered sample is compared to a stored sample (a record) to verify the user.

Re claim 13, it has been discussed above that a comparison is performed. The Examiner notes that it would have been obvious to one of ordinary skill in the art to use a local CPU/third party security vendor device to electronically perform the comparison, in order to have an electronic (automated) means to quickly and reliably perform the comparison, as is conventional in the art. Black teaches (above) that the comparison is performed electronically. As such, the use of such a local CPU/third party security vendor to perform the comparison is an obvious expedient to accurately/electronically perform the comparison process.

Re claim 14, the Examiner notes that as a sample is stored, it's interpreted as registered.

Re claim 15, Black teaches that a customer's account is linked to the sample data, and can be used for payment and is linked to a credit or debit account (abstract, col 6, lines 46+).

Re claim 16, the Examiner notes that it is obvious that the system of Black would be used by a plurality of customers. As such, it would have been obvious that different people have different samples (unique), which would be associated with their different accounts.

Re claim 18, as Black teaches an account is only accessed after a sample is verified, it is interpreted as beginning authentication after verification of the sample.

Re claim 20, the Examiner notes that such teachings are an obvious expedient for additional security, as discussed below.

Re claim 21, Black teaches the device is configured to verify/authenticate an individual for purchasing of goods (abstract), which is broadly interpreted as simultaneous access and initiation of authenticating, such when goods are accessed at purchasing.

Re claims 22 and 34, though silent to secondary security procedures, the Examiner notes that such procedures such as PINs, codes, passwords, additional identifiers etc. are well known and conventional in the art. One would have been motivated to use such procedures for increased security.

Re claim 23, the limitations have been discussed above.

Re claim 24, the Examiner has interpreted the storing of the sample with the system as an authorized sample receiver.

Re claim 25, registering includes proffering a sample (abstract, FIG. 5A of Black).

Re claim 26, the limitations have been discussed above re claim 8.

Re claim 27, Black teaches that a sample is stored and that proffered samples are compared and verified to complete a transaction (abstract).

Re claim 28, the limitations have been discussed above re claim 3.

Re claim 29, Black teaches comparing the proffered sample with stored sample (abstract). Though silent to using the sample in generating a message authentication code and a key, the Examiner notes that a key is an obvious expedient in encryption for increased security. A message authentication code can be broadly interpreted to include a message indicating that authentication is complete/failed. An alternative interpretation of a MAC is that involved in security, and also is an obvious expedient, as discussed later, in re Hohle et al.

Re claims 30, the limitations have been discussed above, and in previous Office Actions.

It is obvious o compare to one of a third party or CPU to facilitate electronic verification (accuracy and security).

Re claim 31, the limitations have been discussed above re claim 9.

Re claim 32, the limitations have been discussed above re claim 11.

Re claims 33 and 46, Black teaches the device is configured to verify/authenticate an individual for purchasing of goods (abstract), which is broadly interpreted as simultaneous access and initiation of authenticating, such when goods are accessed at purchasing.

Re claim 35, the limitations have been discussed above.

Re claim 37, the limitations have been discussed above re claim 8.

Re claims 38-39, the limitations have been discussed above.

Re claims 40-41, though silent to a key and generating a message authentication code, the Examiner notes that in light of the teachings of encryption, as discussed above, a key and a MAC are obvious expedients for additional security.

Re claim 42, the limitations have been discussed above re claim 11.

Re claim 43, the comparison of a proffered sample to a stored/registered sample has been discussed above.

Re claim 44, the limitations have been discussed above re claim 9.

Re claim 45, the Examiner notes that the proffered biometric is indeed compared with a sample of at least one of a criminal, terrorist, and card member, as the sample is compared to a current card members sample, to authorize the transaction.

Re claim 46, verifying the sample using information contained on one of a local database/remote database/third party controlled database would have been an obvious expedient in instances where the data is stored remote from the smartcard (as discussed above, based on security concerns). The biometric would be verified by using information contained in a database, as a preferred means to organize data for efficient and easy storage and retrieval (remote or local).

Re claim 47, the verification of a sample using a protocol/sequence controller (interpreted as a processor) has been discussed above.

4. Claims 3, 4, 7, 20, 28, 29, 36,and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Justin/Hoshino, as discussed above, in view of Hohle et al., as discussed in the previous Office Action.

The teachings of Black/Justin/Hoshino have been discussed above.

Black/Justin/Hoshino are silent to the limitations of the file structure, as claimed and MAC/key.

Hohle et al. teaches such limitations, as cited in the previous Office Action (see FIG. 4 and col 22, lines 47+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin/Hoshino with those of Hohle et al.

One would have been motivated to do this for convenience/integration.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin/Hoshino with those of Hohle et al.

One would have been motivated to do this for security concerns.

Though silent to a key as claimed, the Examiner notes such a keys is an obvious expedient for security (additional).

5. Claims 3, 4, 20, 28, 29, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Justin/Hoshino in view of Brandys (US 2002/0186838).

The teachings of Black/Justin/Hoshino/ have been discussed above.

Black/Justin/Hoshino are silent to the key as claimed.

Brandys teaches such limitations (abstract).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin/Hoshino with those of Brandys for security concerns.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Justin/Hoshino, as discussed above, in view of Moebs et al (US 2005/0065872).

The teachings of Black/Justin/Hoshino have been discussed above.

Black/Justin/Hoshino are silent to primary and secondary associating.

The Examiner notes that such associating is well known in the art (line of credit, for example). Specifically, Moebs et al. teaches that a customer can avoid overdraft by

preauthorizing the financial institution to tie the customers' checking account to one or more of the customers other accounts (paragraph [0017]), interpreted as primary and secondary associating.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin/Hoshino with those of Moebs et al.

One would have been motivated to do this in order to provide for overdraft protection, for example.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Justin/Hoshino, as discussed above, in view of Goodman (US 2002/0043566).

The teachings of Black/Justin/Hoshino have been discussed above.

Black teaches that the transaction is blocked when the biometrics do not match, as is conventional in the art, but Black is silent to deactivation upon rejection of the sample.

The Examiner notes that it is well known and conventional in the art for card to be disabled, as a security measure, if a predetermined amount of failed attempts are detected, for example. Specifically, Goodman et al. teaches deactivation of a card if a predetermined amount of incorrect PIN attempts are detected (paragraph [0029]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin/Hoshino with those of Goodman et al.

One would have been motivated to do this in order to increase system security.

Though Goodman et al. is silent to a biometric input, the Examiner notes that Goodman et al. is relied upon for teaching disabling of access when a matching input is not received. It

would have been obvious to disable the smartcard when biometrics doesn't match (biometrics replacing PIN input, as a more secure alternative).

8. Claims 22 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Justin/Hohle et al., as discussed above, in view of Black (US 2005/0122209).

The teachings of Black/Justin/Hohle et al. have been discussed above.

Re claims 22 and 34, Black/Justin/Hohle et al. is silent to secondary security procedures.

Black '209 teaches such procedures through signature verification (abstract). Black '209 teaches storing of digital and electronic signature for record keeping purposes (paragraph [0125]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Justin/Hohle et al. with those of Black '209.

One would have been motivated to do this for increased security and record keeping purposes.

Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. New art has been cited above.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see attached PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL WALSH
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